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RECs: Tapping Into The Commercial Customer

Making the business case for renewable energy certificates bought by large corporations.

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In last month's issue, we introduced the renewable energy certificate (REC), a relatively new product that represents the environmental and other non-electrical attributes associated with 1 MWh of electricity generated from renewable resources. We also reported that several major U.S. corporations, including Alcoa, Cargill Dow LLC, Delphi Corp., DuPont, Interface, Johnson & Johnson, Kinko's, Pitney Bowes and Staples, completed the nation's largest aggregate corporate purchase of RECs in September 2003. Together, these members of the Green Power Market Development Group bought more than 250,000 MWh per year of RECs from wind and other renewable energy facilities.

Why are Fortune 500 corporations becoming interested in large-scale purchases of RECs? In this article, we explore, from the corporate buyer's perspective, the emerging business case for voluntary REC purchases and the implications for wind power generators.

Corporate REC purchases

Corporations are purchasing RECs to capture a number of benefits. Of particular interest to many buyers are the greenhouse gas (GHG) benefits RECs can provide. By purchasing a certificate, a company can claim the avoided carbon dioxide emissions associated with the REC to help it meet a voluntary corporate GHG emissions goal or target.

RECs are also a means by which companies can achieve their renewable energy targets. DuPont, for instance, has set a target of sourcing 10% of its energy from renewable resources by 2010. For every 1,000 RECs it purchases, the company is effectively "greening" 1,000 MWh of the electricity it consumes. White Wave, a soy foods manufacturer, recently achieved its target of sourcing 100% renewable energy by purchasing wind RECs.

In addition, buying RECs can strengthen a company's relationships with customers, local communities, shareholders, employees and other stakeholders. For example, REC purchases are a way to demonstrate corporate leadership in environmental performance or signal to shareholders that the company is taking steps to manage its GHG risks. RECs can appeal to environmentally concerned customer segments. Furthermore, some companies, such as Interface, are using wind-generated RECs to differentiate their products from those of competitors.

Advantages of RECs

The increasing interest in RECs among corporations is driven, in part, by the advantages that buying certificates can provide relative to purchasing green power (i.e., purchasing RECs "bundled" together with commodity electricity from a retail power provider). Because RECs are sold separately from the underlying electricity, they can offer corporate buyers the following advantages:

• Lower cost. In many situations, REC prices are lower than the typical premium per MWh that a retail electric supplier charges for green power. This is because the unbundled nature of RECs circumvents costs associated with scheduling and delivering electricity and provides buyers access to renewable energy projects located in other regions of the country that may be more price competitive. For instance, wind RECs from facilities in the wind-rich Great Plains often cost less than the premium for wind-generated green power in the Northeast.

• Wider selection of suppliers. RECs provide customers with a wider selection of suppliers than green power. In some areas of the country (e.g., Arkansas, Kansas), RECs may be the only retail renewable energy product available to customers because there are no green power suppliers. In states with regulated electricity markets, a firm has, at most, only one potential green power provider – its utility. In some states with deregulated electricity markets, there may be more than one supplier of green power. However, no matter in which state a company is located, it can choose from among more than 20 retail and wholesale REC marketers, or can approach a number of REC

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brokers or owners of renewable power facilities.

• Greater variety of renewable resource options. Because RECs have no geographic constraints, they can provide companies with the option to buy a renewable energy product from any type of renewable resource. In contrast, in many situations, retail electricity providers are limited to offering green power from a select number of local renewable resources.

• Simplified transactions. Since a firm's retail electric supply arrangements are independent of RECs, purchasing certificates is a relatively simple and straightforward transaction. The customer does not need to change its electricity contracts or switch electricity providers. A customer can buy RECs at any time, regardless of whether or not its electricity contract is up for renewal. Consequently, buying RECs does not change the reliability, quality or terms of service for electricity.

RECs also enable a company to acquire a renewable energy product for multiple facilities at the same time. For instance, instead of negotiating and signing green power contracts for one facility at a time, Staples was able to buy wind-generated RECs for hundreds of stores in just one contract. Such transactional simplicity enables lower administrative costs relative to purchasing green power.

• Easier ability to interact directly with renewable energy projects. Very few customers have the commercial or regulatory infrastructure to permit them to engage in wholesale power transactions. RECs, however, provide a conduit for firms to interact directly with wind and other renewable power generators. Therefore, RECs not only lower costs but also provide buyers with a more direct link to a specific wind project. This can increase the marketing or stakeholder-relation benefits renewable energy provides and also enhances the sense of project sponsorship.

How corporate buyers evaluate REC options

Given the attractiveness of RECs, how, then, are large corporations evaluating and selecting among certificate options? Our experience with the Green Power Market Development Group suggests that large corporate buyers begin by determining the business rationale for an REC purchase. Is it to reduce GHG emissions, strengthen customer relationships or achieve some other business goal? After identifying the business case for an REC purchase, a prospective buyer can more effectively evaluate its purchase options relative to several other factors:

• Type of renewable resource. Some firms may have a preference for the type of renewable resource they support. Many companies specifically choose wind RECs because of the favorable perceptions the general public has of wind power. However, not all firms share this preference. Other factors (e.g., price) can make other renewable resources anattractive alternative to wind RECs.

• Location of renewable power facility. Some companies specifically seek RECs from facilities located in the same state or region as the firm's operations. Such companies may want to demonstrate support for local resources, businesses and communities, or may want to address regional air-quality issues. Other firms have no geographic preferences and, for several reasons, consider RECs from facilities anywhere in the country. First, sourcing RECs nationally increases the likelihood of finding the lowest-cost supply options. Second, some buyers have national brand-name recognition or operations throughout the country. Third, RECs from regions where the avoided carbon dioxide emissions are higher can provide greater climate benefits.

• Certification. Many corporate buyers seek RECs that have been certified by auditing programs such as Green-e or EcoPower℠. Certification assures buyers that the RECs and their associated power were produced by the purported renewable generation facility, delivered in the amount specified, and not "double sold" or claimed by more than one party.

• Vintage. Companies that want to use RECs to meet voluntary GHG emissions targets may seek RECs that are generated in specific years.

Each of the factors outlined above is evaluated against a company's objectives, and trade-offs between price and other features typically must be made. For instance, a company that sets out to purchase locally sourced wind RECs has to decide whether or not it is willing to pay a premium relative to RECs from a more wind-rich region.

Opportunity for wind generators

RECs are becoming an increasingly attractive renewable energy product for corporations interested in reducing the environmental impact of their business activities. Relative to green power, RECs not only provide many of the same business benefits but also have several advantages. Consequently, selling wind certificates to corporations can be an attractive business opportunity for wind project developers and marketers. Through RECs, corporate buyers and wind developers can advance a clean energy future together.

Buying RECs To Differentiate Products

Interface Fabrics Group (IFG) is a manufacturer of panel and upholstery fabrics for commercial interiors. In 2002, the company investigated ways to manufacture its Terratex brand of commercial fabrics with green power. However, it could not find an attractive, local retail green power product for its Maine and Massachusetts production facilities. To overcome this obstacle, IFG turned to RECs.

In 2003, the company started buying certificates equivalent to the amount of electricity used to manufacture 1 million yards of Terratex. The RECs are generated by wind farms located in the Pacific Northwest and are Green-e certified. Green-e is the nation's first voluntary certification and verification program for renewable energy products (www.resource-solutions.org).

One million yards of fabric annually will carry the Green-e logo and a label stating that "100% of the electricity used to make select patterns of Terratex is matched with RECs."

Early indications are that this innovative strategy is having success. The fabrics with the logo have generated both new business and significant interest among key customers.